

Work Order ID 143685

March 21, 2016 9:57:25 AM

U/R

143685

To be pulled on w/0 142652

Bell Order

Page 1

Item ID: D3594-044 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: URF 16-531 Stop ***NS2***
 Item Name: Floor Doubler Assembly, RH
 Start Date: 3/22/2016 Start Qty: 1.00 ***4* 28H** Cust Item ID:
 Required Date: 3/30/2016 Req'd Qty: 1.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: SHA Date: 20160321 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3594	Rev B U/R OK								
100	FLOW WATER JET	0.00							
100	Waterjet								
FLOW CNC Waterjet	Memo	0.00							
	1-Cut as per Dwg D3594								
	Dwg Rev: B								
	Prog Rev: B								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110	QC								
Quality Control	Memo	0.00							
120	QC8- Inspect parts - second check	0.00							
120	QC								
Quality Control	Memo	0.00							

(2)

02/16/03/28

(2)

02/16/03/28

(2)

DAS
38
9-88

MAR 28 2016

DQA:

Date: 16.04.13



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed

Date: 16/04/11

Work Order update only

Work Order: <u>143685</u> Part No. <u>D3594-044</u> NCR No. <u>16-5715</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☒ Engineering ☒ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐							
Date: 14/3/21		Step #: 100		QTY Effective: 2		MRB (QSI042) Approval DAS 12 16/3/21 9-89					
Description Work Order Deviation				Disposition							
Cut doubler per marked up dwg. I.C. customer request				Acceptable is cut doubler with enlarged dimensions. Required to maintain proper edge distance when installing JCS SPRINGS.							
								Completed By DAS 12 16/3/21 9-89			
								Lead hand / Supervisor Approval Verification DAS 38 MAR 8 2016			
QC / QA Coordinator Approval DAS 9 9-89 16-03-28											
Root Cause Environment ☐ No Re-verification ☐ Design ☒ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☒ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Temperature/Cure ☐ Power Loss/Surge ☐ Positioned Wrong ☐ Bending ☐ Set-up ☐ Folio/Program ☐ Outside Dimensions ☒ Centre Not Concentric ☐ BOM/Route ☐ Grain ☐ Over/Under tolerance ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Part Incorrect ☐ Crimp/Kink/Ripple/Wave ☐ Inspection Incomplete/Unqualified ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Cuffs ☐ Contamination ☐ Out of Sequence ☐ Part Moved ☐ Crushing ☐ Countersink ☐ Off-set ☐ Drawing ☐ Heat Treat ☐ Cut Too Short ☐ Mislabeled ☐ Finish ☐ Wave/Twist in Tube ☐ Instructions Incomplete/Unclear ☐ Fit/Function ☐ Misread ☐ Marks/Chatter ☐ Drill Holes ☐ Misaligned/off center ☐ Turning Sequence ☐							
OTHER: customer request											

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Accept

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Stop *NR2*

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	-----------

Accept Qty	Reject Qty	Reject Number	Insp. Stamp

160

QC7-Inspect Chemical Conversion Coat

0.00

160

QC

Memo

0.00

Quality Control

170

0.00

170

Small Fab

0.00

Small Fab

Memo

Small Fab

Install Nut Plates As per Dwg D3594

180

QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

Quality Control

DAS
38
9-89

MAR 30 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : ☐			
Misidentified ☐		Past Due ☐					

Work Order ID 143685

143685

March 21, 2016 9:57:25 AM

Item ID: D3594-044 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: URF 16-531 Stop ***NS2***
 Item Name: Floor Doubler Assembly, RH
 Start Date: 3/22/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 3/30/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: <u>St</u>	0.00							
190									
Packaging	Memo	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

Z MAR 30 2016 DAS
6
9-69

MCS MAR 31 2016
~~MCS MAR 30 2016~~

MCS MAR 30 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐				

Picklist Print

March 21, 2016 9:57:29 AM

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Work Order ID: 143685

143685

Parent Item: D3594-044

D3594-044

Parent Item Name: Floor Doubler Assembly, RH

Start Date: 3/22/2016

Required Date: 3/30/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev :A New Issue 07-01-22 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS20426AD4-4 *MS20426AD4-4* Rivet		Purchased	No			100	Each	4,807.000	2	2		<u>16/03/30</u>	DAS 36 9-89

Location	Loc Qty	Loc Code
GA	2110	
125445	2110	
ST312	2697	
m132536	2697	

M6061T6S.080 *M6061T6S 080* 6061-T6 .080 Sheet		Purchased	No			170	sf	187.7000	0.51	0.536842		<u>on 16/03/28</u>	
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Location	Loc Qty	Loc Code
MAT020	187.7	
134217	32	
m132772	39.9	
m133587	58	
m133828	57.8	

MS21069-5 *MS21069-5* Anchor nuts		Purchased	No			170	Each	88.0000	1	1		<u>16/03/30</u>	DAS 36 9-89
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Location	Loc Qty	Loc Code
ST299	88	
m131920	88	

Under Review Notification

Raised By: M. BELLAVANCE

Product #: D412-698-023

Date: 16.02.25

Product Name: AUTOMATIC DOOR OPENER KIT

Part Number (D-Part and 9-Digit)	Drawing/Document & Current Affected Revision	"Y" or "N" Required for Each Part							Reserved ECN Log Number	Instructions Relevant to Each Part
		HOLD SHIPMENT	Red Tag/Quarantine Stock	Advise Customers	Stop Production	Re-Work Stock	IPP Under Review	Product Specifications Under Review		
D3594-043/-044/-3/-4	D3594 Rev. B	N	Y	N	Y	N	Y	N	16-531	See below.
D412-698-023	IIN-D412-698 Rev. E	N	Y	N	Y	N	Y	N	16-531	See below.

Description of Issue:

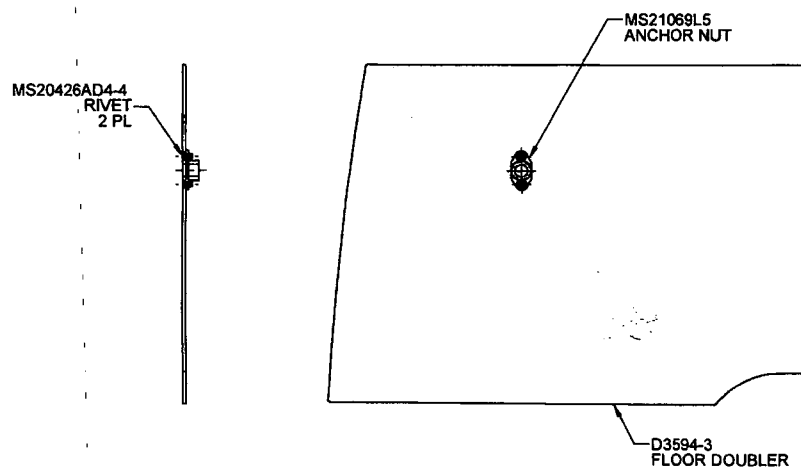
Current stock OK to ship to customers other than Bell Helicopter Mirabel.

If shipping to Bell Helicopter Mirabel: must ship D412-698-023 with enlarged D3594-043/-044/-3/-4. Eng. To sign off deviations on W/Os.

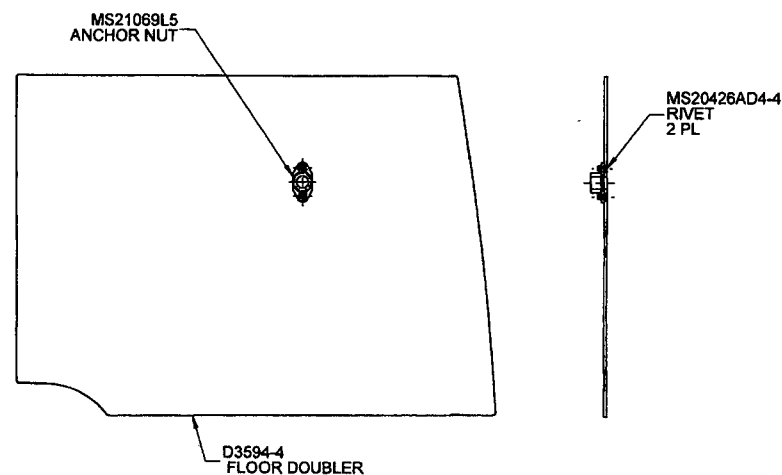
Change: addition of material, 0.25", on the inboard and outboard edges as shown to facilitate installation with existing equipment.

20160321

QTY. -043	QTY. -044	PART NUMBER	DESCRIPTION
X		D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	X	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
1		D3594-3	FLOOR DOUBLER, LH
	1	D3594-4	FLOOR DOUBLER, RH
1	1	MS21069L5	ANCHOR NUT
2	2	MS20426AD4-4	RIVET, CSK



D3594-043 FLOOR DOUBLER ASSEMBLY



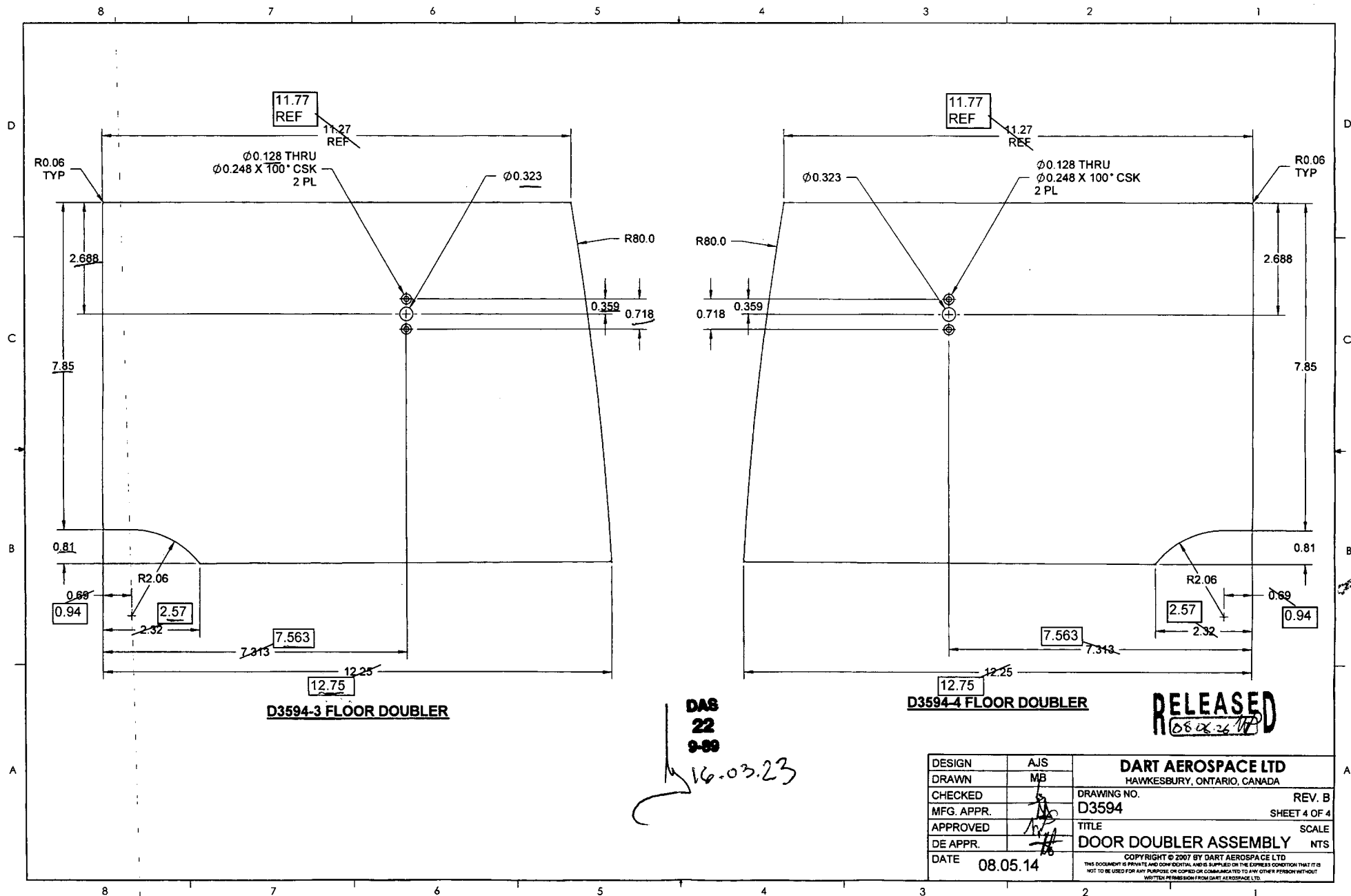
D3594-044 FLOOR DOUBLER ASSEMBLY

NOTES:

- 1) MATERIAL: -3 & -4
6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK,
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-043/-044" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WEIGHT -043 & -044: 0.80 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3594	SHEET 3 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOUBLER	NTS
DATE	08.05.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
08-06-26-14



DART AEROSPACE LTD	Work Order:	143685
Description: Elbow Doubler Aes. RH	Part Number:	123594-041
Inspection Dwg: B514 Rev: B UIR.		Page 1 of 1

INSPECTION SHEET

[illegible]

Measured by:	<i>Dr</i>	Checked by:	<i>38</i> 9-89	QC Inspector:	
Date:	<i>16/03/28</i>	Date:	<i>MAR 28 2016</i>	Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	